

J. H. HOLSEY.
Blasting Plugs.

No. 140,628.

Patented July 8, 1873.

Fig. 1.

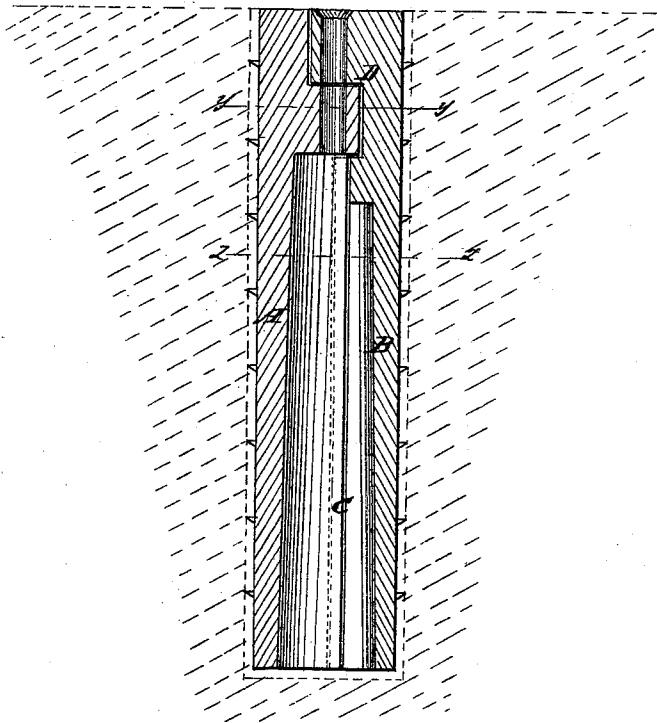


Fig. 2.

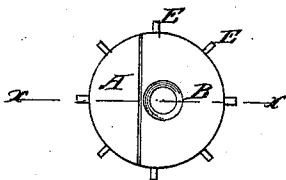


Fig. 3.

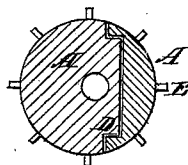
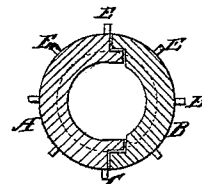


Fig. 4.



Witnesses:

P. C. Distenich
St. Louis

Inventor:

J. H. Holsey
Per *Munnell*
Attorneys.

UNITED STATES PATENT OFFICE.

JULIUS H. HOLSEY, OF BUTLER, GEORGIA.

IMPROVEMENT IN BLASTING-PLUGS.

Specification forming part of Letters Patent No. **140,628**, dated July 8, 1873; application filed April 26, 1873.

To all whom it may concern:

Be it known that I, JULIUS H. HOLSEY, of Butler, in the county of Taylor and State of Georgia, have invented a new and Improved Blasting-Plug, of which the following is a specification:

The first part of my invention consists in having the meeting edges of the hollow blasting-plug made in sections, rabbet-jointed together to prevent the escape of the blast until it has nearly expended its force on the object to be blasted or wholly separated it.

Figure 1 is a sectional elevation of a blasting-plug constructed according to my present invention, the section being taken on the line *xx* of Fig. 2, which is a top view. Figs. 3 and 4 are cross-sections on the lines *yy* and *zz* of Fig. 1.

A and B represent the hollow plug, which, in this example, is divided vertically into two sections, but it may be three or more, if preferred, though it is probable that two are best, the object being, as with all divided plugs, to have a plug that can be repeatedly used, and will not be injured by the blast. These two parts I propose to have rabbet-jointed, both along the edges C and across the top B, so that while the plug is free to separate when the explosion takes place, the blast will be confined some time after the explosion begins, and prevented from escaping at the joints, as it now does from the beginning, so that much of its force is lost by the time the hole is widened, so that the parts have separated as much as they must before any material portion can escape with my present plug. Thus I economize a large proportion of the force now lost. I also propose to provide the plug

with strong spurs E on the sides, to be forced into the wall of the hole of the object to be blasted, to prevent the plug from being forced endwise out of the hole. I propose to bevel them on the lower sides, to adapt the edges to be forced into the walls as they rise upward.

This arrangement is more particularly needed with the rabbet-jointed plugs than others, because the tendency to throw them out is greater; but it is useful to a certain extent with all: First, without rabbeting, the moment the expansion or explosion begins escape of force commences; with rabbeting, the force does not begin to escape at once, nor until the rabbeted parts have passed each other in the opening. Further, the vent-hole during the expansion is totally closed, and therefore, for a moment, no escape of force; which is not true under any other form but the rabbeting parts. Lastly, the rabbeting of the parts allows the plug, in an uneven hole, to adjust itself at top or bottom to the unevenness by a partial expansion, without offering a vent for the explosive power to escape. Experiment has demonstrated these propositions.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

A sectional blasting-plug, rabbet-jointed at the meeting edges, substantially as specified, and rabbet-jointed across the top, as specified.

JULIUS HOPKINS HOLSEY.

Witnesses:

E. B. WATERS,
C. G. OGBURN,
JOSEPH W. JONES.